

IN THE CLAIMS

For the convenience of the Examiner, all pending claims of the Application are reproduced below.

1. (Cancelled)

2. (Currently Amended) The accelerated weight drop ~~as recited in Claim 1 of Claim 40~~ wherein the driver further comprises a compressed gas spring, wherein the said compressed gas spring includes a gas chamber and a piston, wherein said the piston is configured to slide within said the gas chamber to compress a gas therein to create a pressure that drives said the striker toward said the surface.

3. (Currently Amended) The accelerated weight drop ~~as recited in Claim of Claim 2~~ further comprising a charging port coupled to said the gas chamber, said the charging port configured to provide said the gas within said the gas chamber.

4. (Currently Amended) The accelerated weight drop ~~as recited in Claim of Claim 2~~ wherein a push rod connects said the piston to said the striker.

5. (Cancelled)

6. (Cancelled)

7. (Currently Amended) The accelerated weight drop ~~as recited in Claim 2 of Claim 40~~ further including a catch mechanism coupled to said the housing and configured to hold said the striker in a cocked position.

8. (Cancelled)

9. (Currently Amended) The accelerated weight drop ~~as recited in Claim 6 of Claim 40~~ wherein ~~said the~~ housing is coupled to a static load and is configured to transfer ~~said the~~ static load to ~~said the~~ strike plate.

10. (Currently Amended) The accelerated weight drop ~~as recited in Claim of Claim 9~~ further comprising a hydraulic press coupled to ~~said the~~ housing, ~~said the~~ hydraulic press configured to create ~~said the~~ static load.

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Currently Amended) The accelerated weight drop ~~as recited in Claim 1 of Claim 40~~ further comprising a hydraulic lift coupled to ~~said the~~ striker, ~~said the~~ hydraulic lift configured to lift ~~said the~~ striker to a cocked position.

15. (Currently Amended) The accelerated weight drop ~~as recited in Claim 1 of Claim 40~~ wherein multiple of ~~said the~~ compressed gas springs are slidably coupled to ~~said the~~ striker.

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (Cancelled)

28. (Cancelled)

29. (Cancelled)

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (Cancelled)

36. (Cancelled)

37. (Cancelled)

38. (Cancelled)

39. (Cancelled)

40. (New) An accelerated weight drop, comprising:
a striker positionable over a surface;
a housing at least partially surrounding the striker;
a driver operatively coupled to the striker and operable to drive the striker toward the surface; and
an impact isolator operable to allow the housing to move relative to the surface upon an impact of the striker with the surface.

41. (New) The accelerated weight drop of Claim 40, wherein the surface comprises a strike plate.

42. (New) The accelerated weight drop of Claim 41, wherein the surface further comprises an anvil disposed between the strike plate and the striker.

43. (New) The accelerated weight drop of Claim 40, wherein the impact isolator comprises a member having a slot positioned substantially in line with a line of impact of the striker, and wherein the surface comprises a pin operable to be slidably coupled within the slot.

44. (New) The accelerated weight drop of Claim 43, wherein the surface further comprises an anvil disposed between the strike plate and the striker, and wherein the pin is rigidly coupled to the anvil.

45. (New) A method of manufacturing an accelerated weight drop, comprising:
coupling a driver, operable to be driven toward a surface, to a housing,
wherein the housing at least partially surrounds the driver;
rigidly coupling an impact isolator to the housing;
slidably coupling the impact isolator to the surface, wherein the impact
isolator is operable to allow the housing to move relative to the surface upon an impact of the
striker with the surface.

46. (New) The method of Claim 45, wherein the surface comprises a strike plate.

47. (New) The method of Claim 46, wherein the surface further comprises an
anvil disposed between the strike plate and the striker.

48. (New) The method of Claim 45, wherein the impact isolator comprises a
member having a slot and wherein the surface comprises a pin, and wherein slidably coupling
the impact isolator to the surface comprises positioning the pin within the slot substantially in
line with a line of impact of the striker.

49. (New) The method of Claim 48, wherein the surface further comprises an
anvil disposed between the strike plate and the striker and the pin is rigidly coupled to the
anvil, and wherein slidably coupling the impact isolator to the surface comprises positioning
the pin within the slot substantially in line with a line of impact of the striker.

50. (New) The method of Claim 45, wherein the driver further comprises a
compressed gas spring, and wherein the compressed gas spring includes a gas chamber and a
piston.

51. (New) The method of Claim 50, wherein the accelerated weight drop further comprises a charging port coupled to the gas chamber, the charging port configured to provide the gas within the gas chamber.

52. (New) The method of Claim 50, wherein a push rod couples the piston to the striker.

53. (New) The method of Claim 45, wherein the accelerated weight drop further comprises a catch mechanism coupled to the housing and configured to hold the striker in a cocked position.

54. (New) The method of Claim 45, wherein the housing is coupled to a static load and is configured to transfer the static load to the strike plate.

55. (New) The method of Claim 54, wherein the accelerated weight drop further comprises a hydraulic press coupled to the housing, the hydraulic press configured to create the static load.

56. (New) The method of Claim 45, wherein the accelerated weight drop further comprises a hydraulic lift coupled to the striker, the hydraulic lift configured to lift the striker to a cocked position.

57. (New) The method of Claim 51, wherein multiple of the compressed gas springs are slidably coupled to the striker.

58. (New) A seismic survey system, comprising:
a striker positionable over a surface;
a housing at least partially surrounding the striker;
a driver operatively coupled to the striker and operable to drive the striker toward the surface;
an impact isolator operable to allow the housing to move relative to the surface upon an impact of the striker with the surface;
one or more geophones placed proximate the surface, the one or more geophones configured to collect information from seismic waves created upon an impact of the striker with the surface; and
a seismic recorder connected to the one or more geophones, the seismic recorder configured to record the information collected.

59. (New) The system of Claim 58, wherein the surface comprises a strike plate.

60. (New) The system of Claim 59, wherein the surface further comprises an anvil disposed between the strike plate and the striker.

61. (New) The system of Claim 58, wherein the impact isolator comprises a member having a slot positioned substantially in line with a line of impact of the striker, and wherein the surface comprises a pin operably to be slidably coupled within the slot.

62. (New) The system of Claim 61, wherein the surface further comprises an anvil disposed between the strike plate and the striker, and wherein the pin is rigidly coupled to the anvil.

63. (New) The system of Claim 58, wherein the driver further comprises a compressed gas spring, wherein the compressed gas spring includes a gas chamber and a piston.

64. (New) The system of Claim 63, wherein the accelerated weight drop further comprises a charging port coupled to the gas chamber, the charging port configured to provide the gas within the gas chamber.

65. (New) The system of Claim 63, wherein a push rod connects the piston to the striker.

66. (New) The system of Claim 58, wherein the accelerated weight drop further comprises a catch mechanism coupled to the housing and configured to hold the striker in a cocked position.

67. (New) The system of Claim 58, wherein the housing is coupled to a static load and is configured to transfer the static load to the strike plate.

68. (New) The system of Claim 67, wherein the accelerated weight drop further comprises a hydraulic press coupled to the housing, the hydraulic press configured to create the static load.

69. (New) The system of Claim 58, wherein the accelerated weight drop further comprises a hydraulic lift coupled to the striker, the hydraulic lift configured to lift the striker to a cocked position.

70. (New) The system of Claim 64, wherein multiple of the compressed gas springs are slidably coupled to the striker.